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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/489,464	01/21/2000	William H. Connor	SUN-P4061-JTF	5882

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PARK, VAUGHAN & FLEMING LLP
508 SECOND STREET
SUITE 201
DAVIS, CA 95616

EXAMINER

CHEUNG, MARY DA ZHI WANG

ART UNIT PAPER NUMBER

3621

DATE MAILED: 07/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/489,464

Applicant(s)

CONNOR, WILLIAM H.

Examiner

Mary Cheung

Art Unit

3621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 12-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 12-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Status of the Claims

1. Claims 1-10 and 12-25 are pending. Claims 1, 12 and 16 have been amended.

Response to Arguments

2. Applicant's arguments with respect to claims 1-10 and 12-25 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-2, 5-10, 12-13, 16-17 and 20-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakanishi et al., European Patent 0 903 677 A2 in view of Fukuda et al., U. S. Patent 5,890,153 in further view of Smith, U. S. Patent 6,477,539.

As to claim 1, Nakanishi teaches a method for providing concurrency control for a policy-based management system that controls resources in a distributed computing system, comprising (column 1 lines 40-50 and column 2 lines 28-50):

- a) receiving a request to perform an operation on a lockable resource from a controller in the distributed computing system (column 5 line 38 – column 6 line 13 and Figs. 1, 22);

b) wherein the controller and a policy governing the controller comprising a lockable resource, whereby the controller is a hierarchical structure control mean (column 5 line 38 – column 6 line 13 and Figs. 1, 22);

c) wherein the controller sends the request in order to enforce a first policy for controlling resources in the distributed computing system (column 5 line 38 – column 6 line 13 and Figs. 1, 22);

d) Nakanishi teaches locking means acquires to lock an object, locking object determining means determines the object to be locked, and the object would be registered to the locking status (column 5 line 38 – column 6 line 13 and Figs. 1, 22). These matters taught here are correspondence to the matters of determining whether the controller holds a lock on the lockable resource, allowing the controller to execute the operation on the lockable resource if the controller holds the lock on the lockable resource, allowing the controller to acquire the lock if the controller does not hold the lock on the lockable resource, and allowing the controller to execute the operation on the lockable resource if the controller acquires the lock.

Nakanishi does not specifically teach the lockable resource presents one or more independent locks providing access to independent sub-units of the resource and wherein the one or more independent locks allow multiple controllers to lock independent sub-units of the lockable resource independently. However, Fukuda teaches this matter (column 3 line 24 – column 4 line 32 and Fig. 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to

include the feature of independent locks as taught by Fukuda in the system of Nakanishi because user would be able to lock a particular resource as desired without interference with other sources.

Nakanishi modified by Fukuda as discussed above teaches hierarchical structure control means, and a policy may control a lock on a second policy (Nakanishi: Figs. 1, 22; Fukuda: Fig. 3). Nakanishi modified by Fukuda does not specifically teach the second policy may control a lock on a lockable resource. However, this matter is taught by Smith as a multiple level (grandparent, parent, and child) control mean, in which a resource at a higher hierarchy level controls the resource at its lower level such as child or grandchild (column 2 lines 40-47 and column 4 lines 15-24 and column 7 lines 2-22). It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the hierarchical structure control mean of Nakanishi modified by Fukuda to include the feature of a resource at a higher hierarchy level being able to control the resource at its lower level for better organizing the access control of each user.

As to claim 2, Nakanishi teaches the first policy is configured to command resources in the distributed computing system to perform actions so that the distributed computing system operates in accordance with a rule that is enforced by the first policy, wherein the rule governs behavior of resources within the distributed computing system (column 5 line 38 – column 6 line 13 and Figs. 1, 22).

As to claim 5, Nakanishi teaches the lockable resource includes a resource within the distributed computing system (column 5 line 38 – column 6 line 13 and Figs. 1, 22).

As to claim 6, Nakanishi teaches the lockable resource includes a second policy for controlling resources in the distributed computing system (Figs. 1, 5, 7, 9, 11, 13 and 22-26).

As to claim 7, the controller includes a client in the distributed computing system is inherent for Nakanishi's system.

As to claim 8, Nakanishi teaches the controller includes the first policy for controlling resources in the distributed computing system (column 5 line 38 – column 6 line 13 and Figs. 1, 22).

As to claim 9, Nakanishi teaches the controller includes a higher level policy for controlling resources in the distributed computing system, and wherein the lockable resource includes a lower-level policy for controlling resources in the distributed computing system (column 7 line 50 – column 8 line 17 and Figs. 5, 7, 9, 23-25).

As to claim 10, Nakanishi teaches allowing the controller to acquire the lock includes allowing the controller to acquire the lock from a resource that allocates locks to controllers (column 5 line 38 – column 6 line 13 and Figs. 1, 22).

Claims 12-13, 16-17 and 20-25 are rejected for the similar reasons as claims 1-2 and 5-10.

5. Claims 3, 14 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakanishi et al., European Patent 0 903 677 A2 in view of Fukuda et al., U. S. Patent

5,890,153 and Smith, U. S. Patent 6,477,539 as applied to claims 1, 12 and 16 in further view of Sudhakaran et al., U. S. Patent 6,161,150.

As to claim 3, Nakanishi modified by Fukuda and Smith teaches the method of providing concurrency control comprising lockable resources as discussed above. The modified method does not specifically teach throwing an exception if the controller does not hold the lock on the lockable resource and if the controller does not acquire the lock. However, Sudhakaran teach this matter (column 58 lines 63-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of throwing an exception because it would allow the system to perform additional processing as stated by Sudhakaran (abstract).

Claims 14 and 18 are rejected for the similar reason as claim 3.

6. Claims 4, 15 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakanishi et al., European Patent 0 903 677 A2 in view of Fukuda et al., U. S. Patent 5,890,153 and Smith, U. S. Patent 6,477,539 as applied to claims 1, 12 and 16 in further view of Ho, U. S. Patent 5,615,373.

As to claim 4, Nakanishi modified by Fukuda and Smith teaches the method of providing concurrency control comprising lockable resources as discussed above. The modified method does not specifically teach the lock held on the lockable resource expires after a pre-specified lease period, unless the lease is renewed within the pre-specified lease period. However, Ho teaches this matter (column 13 lines 25-29). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of release the lock after a pre-specified lease period unless

the lease is renewed within the pre-specified lease period because it would create flexibility for user to determine how long the resource should be locked.

Claims 15 and 19 are rejected for the similar reason as claim 4.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Guay et al. (U. S. Patent 5,907,844) discloses dynamic external control of rule-based decision making through inherited user defined rules (UDRs) within a computer controlled relational database management system (RDBMs).

Thomas et al. (U. S. Patent 6,061,692) discloses in the database properties stored at one hierarchical level may be inherited by lower hierarchical levels.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Inquire

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary Cheung whose telephone number is (703)-305-0084. The examiner can normally be reached on Monday – Thursday from 8:00 AM to 5:30 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell, can be reached on (703) 305-9768.

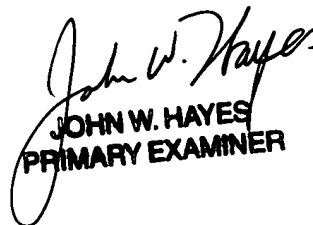
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

The fax phone number for the organization where this application or proceedings is assigned are as follows:

(703) 305-7687 (Official Communications; including After Final
Communications labeled "BOX AF")
(703) 746-5619 (Draft Communications)

Hand delivered responses should be brought to Crystal Park 5, 2451 Crystal Drive, 7th Floor Receptionist.

Mary Cheung
Patent Examiner
Art Unit 3621
July 10, 2003


JOHN W. HAYES
PRIMARY EXAMINER